**FACT SHEET**
**GENERAL PERMIT NO. LAG830000**
**AI 87721**
**PER20070001**

**DISCHARGES RESULTING FROM IMPLEMENTING CORRECTIVE ACTION PLANS FOR CLEANUP OF PETROLEUM UNDERGROUND STORAGE TANK (UST) SYSTEMS**

FACT SHEET FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) REISSUANCE PERMIT FOR DISCHARGES RESULTING FROM IMPLEMENTING CORRECTIVE ACTION PLANS FOR CLEANUP OF PETROLEUM UST SYSTEMS TO WATERS OF THE STATE.

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| Permit No. | LAG830000 |
| Issuing Office: | State of Louisiana<br>Department of Environmental Quality<br>Office of Environmental Services<br>Water Permits Division<br>Municipal and General Water Permits Section |
| Prepared By:<br>(LAC 33:IX.3111.B.7) | Linda Gauthier<br>Municipal and General Water Permits Section<br>(225) 219-0801 |
| Permit Action: | Reissuance of an LPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems |
| Date Prepared | December 1, 2006; Revised March 27, 2007 |

## I. COVERED ACTIVITY (LAC 33:IX.3111.B.1,2)

A petroleum underground storage tank system is defined in 40 CFR 280 as "an underground storage tank system that contains petroleum or a mixture of petroleum with de minimis quantities of other regulated substances ("regulated substance" is defined in 40 CFR 280). Such systems include those containing motor fuels, jet fuels, distillate fuel oils, residual fuel oils, lubricants, petroleum solvents and used oils."

This LPDES permit is being reissued and will replace the current LPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems (LAG830000), which was issued by the Louisiana Department of Environmental Quality (LDEQ) on December 10, 2002, effective December 15, 2002, and modified August 1, 2005.

The availability of an LPDES general permit for Discharges from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems streamlines the permit process by eliminating the need to develop and issue an individual LPDES permit for discharges associated with implementing every site-specific Corrective Action Plan in the state. Facilities implementing a Corrective Action Plan generate common types of several types of wastewater and potentially contaminated storm water during the remediation of soil and groundwater contaminated by leaking or failing petroleum UST systems. If the Department were required to issue an individual LPDES permit for discharges from each of these contaminated sites, each permit would be almost identical; however, it would take considerably more time for each site to obtain a wastewater discharge permit. The availability of this general permit for wastewater discharges resulting from cleaning up petroleum contaminated UST sites facilitates the cleanup process by minimizing the time period required to issue LPDES permits to consistently regulate wastewater discharges from each of the contaminated sites.

Issuing individual LPDES permits for discharges resulting from implementing Corrective Action Plans for cleanup of petroleum UST systems would be an inefficient use of department resources and would unnecessarily delay the implementation of Corrective Action Plans that are vital to ensuring that contaminated UST sites are remediated as expeditiously as possible to protect public health and the environment. Faster cleanups is one of four of the EPA Initiatives contained in the Framework of UST Initiatives which was developed to guide the future underground storage tank work that remains to be completed across our nation. The Framework of UST Initiatives are contained in the attached undated memo from Timothy Fields, Jr., EPA Regional Administrator.

The EPA Underground Storage Tanks (UST) Internet website contains valuable information about issues related to USTs. The topic *"Why do UST releases need to be cleaned up?"* provides the following information:

> "EPA's federal underground storage tank (UST) regulations require that contaminated UST sites must be cleaned up to restore and protect groundwater resources and create a safe environment for those who live or work around these sites. Petroleum releases can contain contaminants like MTBE and other contaminants of concern that can make water unsafe or unpleasant to drink. Releases can also result in fire and explosion hazards, as well as produce long-term health hazards." See the attached document on "Cleaning up Underground Storage Tank System Releases" that was

printed from the EPA website.

The attached undated EPA document from Timothy Fields, Jr., states:

> "While preventing releases is the first line of protection, cleaning up tanks that have already released petroleum into the environment is equally important and challenging. Nationwide, there are approximately 160,000 petroleum releases, such as those on private property, public property (or state/local property), tribal lands, and Federal facilities, that need to be cleaned up. Although tank owners are responsible for these cleanups (and states are primarily responsible for oversight, EPA is making these cleanups a higher national priority with the intent of increasing the pace at which cleanups are initiated and completed. ..."

Discharges from petroleum UST system cleanups can originate from several sources, including: contaminated ground water, purge water from groundwater monitoring wells, tank washwater and ballast waters; wastewater associated with the remediation of petroleum contaminated soils and groundwater; dewatering releases associated with the excavation of petroleum contaminated soils; and potentially contaminated storm water.

The availability of a general permit for discharges resulting from implementing a corrective action plan for cleanup of petroleum UST systems facilitates the cleanup and restoration of groundwater resources to create a safe environment for those who live or work around sites contaminated by leaking or failing UST systems. The removal of contaminants from areas and groundwater contaminated by leaking or failing USTs is also essential to protect the water quality of surface water bodies that are hydrologically connected to contaminated areas and/or groundwater, including water bodes designated as Outstanding Natural Resource Waters.

The reissued permit shall cover discharges of treated wastewaters, groundwater and/or storm water from petroleum contaminated sites implementing a Corrective Action Plan to cleanup sites contaminated by leaking or failing petroleum UST systems. Petroleum UST systems are commonly located at gas stations, convenience stores, truck stops, and vehicle maintenance and storage facilities with fuel pumps, as well as any facility where petroleum products are stored in underground storage tanks.

Authorization to discharge under this general permit will be available to eligible facilities that generate any of the following types of wastewater or storm water:

1) treated groundwater;

2) purge water from groundwater monitoring wells;

3) tank washwater and ballast waters;

4) wastewater associated with the remediation of petroleum-contaminated soils and groundwater;

5) dewatering releases associated with the excavation of petroleum-contaminated soils; and

6) potentially contaminated storm water from sites implementing Corrective Action Plans for Cleanup of Petroleum UST Systems.

All wastewaters and storm water covered by this permit must be treated, if necessary, to meet the effluent limitations, before being discharged from the site of origin.

The Toxicity Characteristic Leaching Procedure (TCLP) must be conducted if it is required by other environmental regulations. Wastewater which is subject to the TCLP may be discharged in accordance with the permit **only** after it has been determined to be non-hazardous. Approval for disposal of hazardous wastewater must be obtained from the Office of Environmental Services, Waste Permits Division.

## II. OBTAINING COVERAGE

Proposed facilities desiring coverage under this permit must submit an NOI at least fourteen (14) days prior to the proposed commencement of discharge. The PST-G form is the form that must be completed and submitted to LDEQ for permit coverage. The PST-G form may be obtained by contacting the LDEQ Customer Service Center at (225) 219-5337, or from the LDEQ web site at http://www.deq.louisiana.gov/portal/Portals/0/permits/lpdes/index.htm.

Existing facilities conducting activities that result in discharges eligible for coverage under this permit but are not permitted by an LPDES permit should submit an NOI immediately.

If a potential permittee is identified as having the potential to cause or contribute to the violation of an in-stream water quality standard during the NOI review process, coverage under the LPDES general permit will be denied and an individual permit will be proposed for the discharges should it be determined that the facility's discharges can be adequately regulated under an individual LPDES permit.

All NOIs that are submitted to request statewide coverage shall contain an attachment that lists each existing site that will be covered under the statewide authorization number. Any sites on the list attached to the NOI that have a site-specific permit number should note that site-specific number, along with the permittee's request to cancel, so that the site-specific permit number can be canceled when the statewide permit authorization number is issued.

Any permittee covered by an individual permit or other general permit(s) may submit an NOI and request that the individual permit or other general permit(s) be canceled if the permitted source or activity is also eligible for coverage under this general permit. Upon approval by this Office, the permittee will be concurrently notified of coverage by this general permit and of cancellation of the previous permit(s).

Dischargers who are currently permitted under the LPDES version of this permit that expires on December 14, 2007, are not required to submit a new NOI. These permitted dischargers will be automatically covered under the reissued LPDES permit. Notification of coverage and a copy of the permit will be sent to each permittee after permit finalization. Permit conditions in the reissued permit are effective for these automatically-authorized permittees three (3) days after the postmark date of the notification of the facility's coverage under the reissued general permit.

## III. DISCHARGE DESCRIPTION (LAC 33:IX.3111.B.2)

The general permit will authorize only discharges identified above in Part I, which result from the implementation of a Corrective Action Plan for cleanup of petroleum underground storage tank (UST) systems.

This general permit **shall not** apply to:

1. petroleum-contaminated water generated at sites that are not implementing a Corrective Action Plan for Cleanup of a Petroleum UST System;
2. petroleum contaminated water generated at a different site/facility;
3. wastewater that fails the TCLP test;
4. discharges listed above (items 1 - 6) that are mixed with other, non-covered discharge types unless those other discharges are in compliance with another LPDES permit;
5. discharges of wastewaters which have limits assigned to them in the Louisiana Water Quality Management Plan or an approved Waste Load Allocation which are different from the limits contained in this permit;
6. discharges of wastewater determined by the Department to present an environmental risk or potential risk of discharging pollutants other than those intended to be regulated by this permit; or
7. discharges which cause or contribute to the violation of a state water quality standard.

This general permit **may not** apply to:

1. discharges from facilities not in compliance with a previously issued individual or general wastewater discharge permit;

2. discharges from facilities which have previously been in violation of state water quality regulations;

3. discharges from facilities which are located in an environmentally sensitive area including streams designated as Outstanding Natural Resource Waters;

4. discharges from facilities which owe any outstanding fees or fines to the Department;

5. discharges which are likely to have unauthorized adverse effects upon threatened or endangered species, or on the critical habitat for these species as determined in conjunction with the U.S. Fish and Wildlife Service (USFWS); or

6. discharges which adversely affect properties listed or eligible for listing in the National Register of Historic Places, unless they are in compliance with requirements of the National Historic Preservation Act and any necessary activities to avoid or minimize impacts have been coordinated with the Louisiana State Historic Preservation Officer (for questions, the operator should contact the Section 106 Review Coordinator, Office of Cultural Development, P. O. Box 44247, Baton Rouge, LA 70804-4247 or telephone (225) 342-8170).

The Department may deny coverage under this permit and require submittal of an application for an individual LPDES permit based on a review of the NOI or other information. This Office reserves the right to issue such facilities an individual LPDES permit with more appropriate limitations and conditions.

## IV. DISCHARGE LOCATION (LAC 33:IX.6519.A.1)

Within the geographic boundaries of the State of Louisiana.

## V. RECEIVING STREAM/USES (LAC 33:IX.6519.A.2)

A covered facility may discharge to or flow to any water body within the geographic boundaries of the State of Louisiana, as defined in LAC 33:IX.1123 and 2313.

The possible designated uses of the receiving streams are:

Primary Contact Recreation
Secondary Contact Recreation
Propagation of Fish and Wildlife
Oyster Propagation
Drinking Water Supply
Agriculture
Outstanding Natural Resource Waters

Limited Aquatic Life and Wildlife Use

## VI. PROPOSED EFFLUENT LIMITATIONS AND/OR CONDITIONS

The specific effluent limitations and/or conditions will be found in the permit. Development of permit limits is detailed in the Permit Rationale section below.

## VII. PERMIT RATIONALE (LAC 33:IX.3111.B.4, LAC 33:IX.3305.B.1.d)

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the permit. The proposed effluent limitations and/or conditions contained in this permit are a continuation of those implemented in the current LPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum Underground Storage Tank (UST) Systems (effective December 15, 2002; modified August 1, 2005).

### A. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two. For the covered discharges, no effluent limitation guidelines have been promulgated so limitations are determined by BCT and BPJ.

Concentration limits are used in accordance with LAC 33:IX.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurement.

Frequently, EPA adopts nationally applicable guidelines identifying the BPT, BCT, and BAT standards to which specific industrial categories and subcategories are subject. Until such guidelines are published, however, CWA Section 402(a)(1) requires that appropriate BCT and BAT effluent limitations be determined using best professional judgment (BPJ). Since national guidelines establishing BPT, BCT, and BAT standards have not been promulgated for discharges covered by this general permit, the appropriate BCT and BAT limitations have been established based on BPJ, as required by CWA Section 402(a)(1) and LAC 33:IX.3705.

Discharges of storm water and wastewaters from remedial activities at sites contaminated by leaking or failing petroleum USTs may be non-continuous in nature. The determination of flow from these outfalls is derived by estimate of the flow. Because of the intermittent or non-continuous nature of discharges that may be authorized under this general permit, the effluent limitations for discharges will be in terms of concentrations, as allowed by LAC

33:IX.2709.F.1 and 40 CFR 122.45.

B. TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS (LAC 33:IX.3111.B.4)

1. GENERAL COMMENTS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgment) in the absence of guidelines, or on a combination of the two. Effluent guidelines have not been promulgated for the types of discharges that are covered by this permit, so limitations were determined based on BPJ and on previously issued permits for similar discharges.

Discharges that may be authorized under this general permit will be those wastewater or storm water discharges described in Part I (items 1-6, page 3 of 19) of this fact sheet. The permit is intended to cover only the specific types of discharges described in Part I of this fact sheet.

LAC 33:IX.2709.D requires that all permit effluent limitations for continuous discharges, including limitations necessary to achieve water quality standards, have daily maximum and monthly average (daily average) discharge limitations for all dischargers other than publicly owned treatment works. Because this permit offers coverage for discharges which may be either of a batch or a continuous nature, the permit contains both monthly average and daily maximum effluent limitations.

Discharges under this general permit will be releases related to implementing a corrective action plan for cleanup of petroleum UST systems. The draft permit is intended to cover only those discharges described above in Part I of this fact sheet.

Other than the following changes, the permit limits and conditions are equivalent to those in the current LPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems (effective December 15, 2002; modified September 1, 2005) and the current LPDES General Permit LAG940000 for Discharges of Treated Groundwater, Potentially Contaminated Storm Water, and/or Associated Wastewaters (from non-UST sites) (issued and effective 1/1/2006).

a) TMDL language was not included in the current version of the permit. The State Water Quality Standards section of the reissuance general permit includes TMDL information and the requirement that "should any TMDLs and wasteload allocations which address these discharges be developed, implementation within the required time frames for application of these requirements will be completed."

b) Footnote 2 on page 8 of 12 of Part I of the permit was added to specify what monitoring schedule should be followed when a treatment system is temporarily shut down. LDEQ Remediation regulations require a treatment system to be shut down for a period of 48 hours prior to taking groundwater samples. These LDEQ mandated shut downs are not initiated for maintenance and/or repair purposes; therefore the treatment systems should be effectively treating contaminated water at the time that the system is shut down and continue to effectively treat contaminated water when the treatment system is restarted after the groundwater samples have been collected. In most cases, the UST Trust Fund pays for compliance monitoring at facilities that are permitted under LAG830000. UST Trust Funds would be unnecessarily spent to pay for accelerated monitoring when the treatment system is restarted simply because it was shut down for a short time in order to allow proper collection of groundwater samples.

c) Footnote 2 on page 8 of 12 of Part I of the permit was added to ensure that all permittees are aware that they are required to reinstitute once/week sampling at start up of a treatment system that was shut down for maintenance and repair activities. The accelerated monitoring is required to ensure that the groundwater treatment system is operating effectively and the treated water meets the effluent limitations specified in permit LAG830000.

d) Item 5, Page 10 of 12 of Part I was added to ensure consistency with the requirements of other LPDES permits. Because the flow measurement sample type is "estimate", the permittee may estimate the flow value by using best engineering judgment as specified in LAC 33:IX.2701.

e) Part I, Page 4 of 12 of the permit offers guidance and instructions related to modification of a facility's authorization to discharge and transfer of permit coverage when a permitted facility changes ownership. The first two paragraphs on Part I, Page 4 of 11 of the permit were added to facilitate compliance with LDEQ regulations related to changes in facility ownership and transfer of permit coverage when a facility changes ownership.

f) Part I, Page 11 of 12: DMR submittal requirements were changed from yearly submittal in the current version of the permit to quarterly submittal in the draft renewal permit.

## 2. LIMITED PARAMETERS AND MONITORING REQUIREMENTS:

The permit contains the following effluent limitations and monitoring requirements.

| EFFLUENT CHARACTERISTICS | DISCHARGE LIMITATIONS | | MONITORING REQUIREMENTS | |
|---|---|---|---|---|
| | MONTHLY AVERAGE | DAILY MAXIMUM | MEASUREMENT FREQUENCY [1, 2] | SAMPLE TYPE |
| Flow (MGD) | Report | Report | 1/week | Estimate |
| TOC | 50 mg/L | 50 mg/L | 1/week | Grab |
| Benzene [3] | 5 µg/L | 5 µg/L | 1/week | Grab |
| Total BTEX [4] | 100 µg/L | 100 µg/L | 1/week | Grab |
| Lead, Total | 50 µg/L | 50 µg/L | 1/week | Grab |
| Polynuclear Aromatic Hydrocarbons (PAH) | 10 µg/L | 10 µg/L | 1/month | Grab |
| pH - Allowable Range (Standard Units) | 6.0 (Minimum) | 9.0 (Maximum) | 1/week | Grab |

The regulated parameters and the monitoring frequencies established in the permit are consistent with those contained in the current LPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum Underground Storage Tank (UST) Systems (effective December 15, 2002; modified August 1, 2005), and the current LPDES General Permit LAG940000 for Discharges of Treated Groundwater, Potentially Contaminated Storm Water, and/or Associated Wastewaters (from non-UST sites) (issued and effective 1/1/2006).

The determination of flow from permitted outfalls shall be derived by estimate of the flow.

pH effluent limitations in the range of a minimum of 6.0 standard units to a maximum of 9.0 standard units is included in this permit, based on Best Control Technology (BCT) based on available pH adjustment technologies; based on LAC 33:IX.5905.C; and based on the LPDES Dewatering of Underground Storage Tank Bed General Permit. This effluent limitation was also included in the current LPDES General Permit for Discharges from Light Commercial Facilities, as well as other LPDES general permits issued by this Office. This effluent limitation can also be found in the EPA Region VI Storm Water Guidance Document and in previous individual and general permits issued by the Office of Environmental Services (formerly the Office of Water Resources).

Because of the intermittent or non-continuous nature of discharges that may be authorized under this general permit, the effluent limitations for discharges will be in terms of monthly

average and daily maximum concentrations, as allowed by LAC 33:IX.2709.F.1 and 40 CFR 122.45.

The technology limits as proposed are not expected to cause an exceedance of water quality standards in the receiving streams.

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity (LAC 33:IX.2369/40 CFR 122.48(b) and to assure compliance with permit limitations (LAC 33:IX.2361.I.1/40 CFR 122.44(I)(1)).

The monitoring frequencies established in the permit are consistent with the current LPDES General Permit for Discharges Resulting from Implementing a Corrective Plan for Cleanup of Petroleum Underground Storage Tank Systems and the current LPDES General Permit LAG940000 for Discharges of Treated Groundwater, Potentially Contaminated Storm Water, and/or Associated Wastewaters.

Monitoring for all parameters (except PAHs) shall be 1/week using grab samples. During the first four (4) weeks of discharge; however, a limit violation for any parameter increases the monitoring frequency for that parameter to daily until a sample demonstrates compliance. After demonstrating compliance for that parameter, the daily sampling reverts to 1/week for the remainder of the initial four (4) week discharge period. After demonstrating permit limit compliance for four (4) consecutive weeks, the monitoring frequency shall be reduced to 1/month upon the permittee's submission of a certification of such compliance. If a subsequent limit violation occurs, the frequency for that parameter reverts to 1/week until another 4 week compliance period is demonstrated.

PAH monitoring shall be 1/month using grab samples. After four (4) consecutive months of compliance the monitoring frequency shall decrease to 1/3 months. If any subsequent monitoring event results in an exceedance of the permit limitation then the monitoring frequency shall revert to 1/month until four (4) consecutive months of compliance are achieved.

The LDEQ Remediation Division requires that groundwater treatment systems be shut down for a period of 48 hours prior to taking groundwater samples. In this case, when the treatment system is shut down for a period of 48 hours prior to taking groundwater samples, then sampling shall resume at the sampling frequency that was effective just prior to the 48-hour shut down. The permittee shall resume monthly sampling provided that four consecutive weeks of compliance had been achieved prior to the 48-hour system shutdown.

When the groundwater treatment system is shut down for maintenance and repair, sampling will resume at once/week intervals until four consecutive weeks of compliance are achieved. It is necessary to resume sampling as if sampling had never occurred in order to

ascertain any problems with the treatment system have been corrected and it is once again operating efficiently and treating wastewater sufficiently to meet the effluent limits of the permit prior to resuming monthly sampling.

Daily maximum and monthly average effluent limitations of 50 mg/L TOC shall be included in this general permit for covered discharges. The total amount of organically bound carbon will be more clearly measured using TOC, which will be limited under Best Available Technology Economically Achievable (BAT) based on Best Professional Judgment (PBJ). This effluent limitation for TOC was assigned in the current LPDES General Permit for Discharges Resulting from Implementing a Corrective Plan for Cleanup of Petroleum Underground Storage Tank Systems; and the current LPDES General Permit LAG940000 for Discharges of Treated Groundwater, Potentially Contaminated Storm Water, and/or Associated Wastewaters. This effluent limitation can also be found in the EPA Region VI Storm Water Guidance Document; the LPDES General Permit for Dewatering of Petroleum Storage Tanks, Tank Beds, New Tanks and Excavations; the LPDES General Permit for Discharges from Light Commercial Facilities; the LPDES Cement, Concrete and Asphalt Facilities General Permit; in recent individual permits issued by this Office; in the Final National Pollutant Discharge Elimination System Storm Water Multi-Sector General Permit for Industrial Activities, Federal Register, Friday, September 29, 1995; and LDEQ Storm Water Guidance letter from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region VI), dated June 17, 1987.

Benzene: EPA documents cite a study that was performed for the Gas Research Institute (GRI) and is titled "Environmental Aspects of Hydrostatic Test Water Discharges: Operations, Characterization, Treatment and Disposal." The GRI study gathered data on benzene, BTEX, oil and grease, and TSS. This study illustrates that benzene can be a pollutant of particular concern in discharges from facilities which have been used for the storage or transportation of liquid or gaseous petroleum hydrocarbons. Benzene is an appropriate BAT parameter representing the toxic hydrocarbons which may be present in discharges of resulting from implementing a Corrective Action Plan for cleanup of a petroleum UST system. Therefore, the permit contains a limitation, based on BAT, for benzene. Based on the above mentioned study, the current LPDES General Permit for Discharges Resulting from Implementing a Corrective Plan for Cleanup of Petroleum Underground Storage Tank Systems; and the current LPDES General Permit LAG940000 for Discharges of Treated Groundwater, Potentially Contaminated Storm Water, and/or Associated Wastewaters; the permit contains a daily maximum limitation and monthly average limitation concentration of 5 μg/L benzene. When analytical test results report a Benzene concentration of less than 10 μg/L, that result may be reported as zero on the Discharge Monitoring Report (DMR) form that is submitted to the LDEQ Office of Environmental Compliance, because 10 μg/L is the Minimum Quantification Level (MQL) for Benzene.

The MQL is defined as the lowest concentration that can be reliably quantified with specified limits of precision and accuracy during routine laboratory operating conditions. Any concentration that is reported below the MQL is not scientifically reliable and thus unenforceable. Therefore EPA and LDEQ allow results below the MQL to be reported as 0. For data collection purposes, both the EPA and LDEQ are interested in collecting accurate, representative data that reflect scientifically defensible testing protocols.

Total BTEX: BTEX components such as toluene and xylenes may be present in water contaminated by liquid or gaseous petroleum hydrocarbons. EPA documents cite a study that was performed for the Gas Research Institute (GRI) and is titled "Environmental Aspects of Hydrostatic Test Water Discharges: Operations, Characterization, Treatment and Disposal." The data in the GRI study illustrate that BTEX can be a pollutant of particular concern from hydrocarbons stored in storage tanks. The BTEX parameter is determined to be an appropriate indicator parameter for other hydrocarbon fuel components which might be discharged from sites implementing a Corrective Action Plan for cleanup of petroleum UST systems. Because of the highly variable composition of petroleum hydrocarbon fuels, for some products any one of the four BTEX constituents can be the predominant constituent; therefore, application of this aggregate parameter is appropriate.

A Daily maximum and monthly average BAT effluent limitation of 100 µg/L has been established in this general permit for Total BTEX. This limitation is well below the total of the human health drinking water criteria for benzene, ethylbenzene, and toluene, the BTEX constituents for which standards are established in LAC 33:IX.1113. The other constituent, xylene, is not expected to be present in amounts which might significantly affect the totals. This pollutant is of concern mainly in aviation fuels, which will constitute at most only a small number of the total discharges this permit will authorize. The proposed effluent limitation of 100 µg/L for Total BTEX is the same as that used in the current LPDES General Permit for Discharges Resulting from Implementing a Corrective Plan for Cleanup of Petroleum Underground Storage Tank Systems; and the current LPDES General Permit LAG940000 for Discharges of Treated Groundwater, Potentially Contaminated Storm Water, and/or Associated Wastewaters, and well as the current LPDES General Permit for Discharges from Light Commercial Facilities and the LPDES General Permit for Discharges of Hydrostatic Test Wastewater.

The Vol. 62, No. 220, Friday, November 14, 1997 Federal Register *Notice* that announced the issuance of the initial Final NPDES General Permits for Discharges Resulting From Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems in Texas (TXG830000), Louisiana (LAG830000), Oklahoma (OKG830000), and New Mexico (NMG830000) noted that many comments were received during the draft permit public comment period that requested increasing the benzene and BTEX effluent limitations to those contained in individual state issued permits that were being issued when the initial

NPDES general permit was finalized. The EPA refused to increase the BAT limits in the Final NPDES general permit from those that were proposed in the Draft NPDES general permit, stating that "the administrative record supports the BAT limits for benzene and BTEX as proposed .... An examination of the nearly 2000 LDEQ data points each for both benzene and BTEX showed the proposed permit limits could be met the vast majority of the time. When the proposed limits were not being met, they were generally very high levels and caused by treatment system malfunctions." The renewal permit contains accelerated monitoring requirements if permit effluent limitations are exceeded to ensure that treatment system malfunctions are corrected expeditiously. The LDEQ Office of Environmental Compliance identifies permittees who exceed permit limitations and penalizes violators according to current regulations and enforcement procedures.

Total Lead: An effluent limitation for lead is included in this general permit for discharges of treated groundwater that is generated at sites implementing Corrective Action Plans for cleanup of petroleum UST systems. Lead was previously used as a fuel additive in gasoline, but that use was discontinued. Further, this Office has found through its permitting experience with the LPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems in Louisiana that lead is a useful parameter, in conjunction with Total BTEX, for the regulation of hydrocarbons discharged from groundwater treatment systems at UST sites that are contaminated due to leaking or failing UST systems. A lead BAT effluent limitation of 50 µg/L is therefore established. The 50 µg/L limit is equivalent to the in-stream criterion applicable to surface water bodies designated as Drinking Water Supply sources, and protects for primary and secondary contact recreation and fish consumption. This effluent limitation is also utilized in the LPDES General Permit for Discharges Resulting from the Dewatering of Petroleum Storage Tanks, Tank Beds, New Tanks and Excavations related to the surface cleanup of spills or leaks resulting from the handling of petroleum; the current LPDES General Permit for Discharges from Light Commercial Facilities; the current LDPES General Permit for Potentially Contaminated Storm Water, and/or Associated Wastewater; and the current LPDES General Permit for Discharge of Hydrostatic Test Wastewater.

Polynuclear Aromatic Hydrocarbons (PAHs): The Fact Sheet for the EPA issued LPDES General Permit for Discharges Resulting From Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems in Louisiana states that PAH's are highly carcinogenic at relatively low levels and are, therefore, of potential concern. Any of a number of refined petroleum products may be present at sites contaminated by non-gasoline hydrocarbons. Benzene and BTEX have been established as indicator parameters for the treatment of gasoline-contaminated groundwater and will serve as indicator parameters for the more volatile components of other petroleum products. Since many of these other refined petroleum products may be relatively nonvolatile, additional parameters are necessary to

assure proper treatment of the nonvolatile components of these petroleum products in contaminated ground water, surface water, storm water, and/or associated wastewaters. There are several PAHs present in many refined petroleum products which are on the list of Clean Water Act section 307(a) toxic pollutants for which BAT controls must be established. The Development Document (1982) for the Petroleum Refining Point Source Category guidelines defining BAT discusses the toxic pollutants generated in the refining processes which were detected in refinery wastewater. Ten PAHs were found in the untreated, partially treated or fully treated wastewater from the group of refineries samples. Acenaphthene, acenaphthylene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(ghi)perylene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluoranthene, fluorene, indeno(1,2,3,cd)pyrene, naphthalene, phenanthrene and pyrene are PAHs that might be constituents of petroleum contamination at sites contaminated by petroleum products other than gasoline, jet fuel or kerosene. The proposed effluent limitation of 10 µg/L for PAHs is the same as that in the EPA issued General Permit for Discharges Resulting From Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems in Louisiana, the current LPDES General Permit for Discharges Resulting from Implementing a Corrective Plan for Cleanup of Petroleum Underground Storage Tank Systems; the current LPDES General Permit LAG940000 for Discharges of Treated Groundwater, Potentially Contaminated Storm Water, and/or Associated Wastewaters; and the current Hydrostatic Test Wastewater General Permit and is applied to covered discharges **other than those solely related to gasolene, jet fuel, and/or kerosene cleanup**.

## C. MONITORING FREQUENCIES FOR LIMITED PARAMETERS

Regulations require permits to establish monitoring requirements to yield data representative of the monitored activity (LAC 33:IX.2715/40 CFR 122.48(b)) and to assure compliance with permit limitations (LAC 33:IX.2707.I.1/40 CFR 122.44(I)(1)).

The permit establishes monitoring frequencies at 1/week at each outfall for all parameters with the exception of PAHs which are to be monitored monthly. The permit requires more frequent monitoring for all parameters if a permit limit excursion occurs during any sampling event.

The monitoring frequencies assigned to each parameter in the permit are equivalent to the monitoring frequencies used in existing LPDES general permits and in individual LPDES permits issued by this Office for similar type of discharges.

## VIII. PUBLIC NOTICES (LAC 33:IX.3111.B.6)

The public notice describes the procedures for the formulation of final determinations.

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested person may submit written comments on the permit. Any interested person may also submit a written request for clarification of issues related to the content of the general permit or the permit issuance process. Interested persons may also submit written requests for notification of the final permit decision or to request a public hearing to clarify issues involved in the permit decision. A request for a public hearing shall state the nature of the issues proposed to be raised in the hearing. The public notice specifies that written comments and/or written requests shall be submitted to the LDEQ Public Participation Group and that written comments and/or written requests must be received by the Department by a specific deadline.

Public notice will be published in:

THE ADVOCATE of Baton Rouge
LAKE CHARLES AMERICAN PRESS
THE ADVERTISER of Lafayette
THE TIMES of Shreveport
THE TIMES PICAYUNE of New Orleans
THE NEWS-STAR of Monroe
THE TOWN TALK of Alexandria
THE COURIER of Houma

LDEQ Permits Public Notice Mailing List
LDEQ Permits Public Web Page at http://www3.deq.louisiana.gov/news/pubnotice/default.asp.

In addition to the public notice procedures described above, a notice will be placed in *The Advocate* that identifies this permit as well as other permits placed on public notice for the previous week for facilities located in the following hurricane impacted parishes: Orleans, and St. Bernard. The notices will clearly identify the electronic web link to view the public notices and will provide a telephone number to call to request additional information or to find out where documents may be reviewed locally.

Additional precautions will be taken to assure that people who live in the parishes most severely impacted by the hurricanes that struck the Louisiana coastline in 2005 receive notice of the draft permit. The following additional public notice procedures will apply to public notice of the draft permit in Orleans and St. Bernard parishes:

The public notice will also be published in an additional newspaper in a parish that physically adjoins Orleans parish and a parish that physically adjoins St. Bernard parish. This additional public notice will be published in the newspaper with the largest circulation in the adjoining parish.

The draft permit, NOI, and fact sheet will be available for review at the LDEQ Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana, during the hours of 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays).

The Water Permits Division will send notification of the final permit decision to each person who has submitted written comments or a written request for notification of the final decision.

## IX. ENDANGERED SPECIES ACT

The proposed limitations on these discharges are sufficiently stringent to assure state water quality standards, both aquatic life and human health protection, will be met for any receiving stream throughout the state. The effluent limitations established in this permit mirror those found in the current permit that became effective on December 15, 2002. Prior to its issuance, the current permit was approved by the United States Fish and Wildlife Service (USFWS). The effluent limitations in this reissuance permit ensure protection of aquatic life and maintenance of the receiving water as an aquatic habitat. Correspondence from the USFWS dated September 29, 2006, states that the Service has determined that general permit LAG830000 contains effluent limitations that are protective of aquatic life and will ensure that water bodies that receive discharges that are in compliance with the permit will be protected as a sustainable aquatic habitat; therefore the Service has determined that no coordination is required for facilities that submit an NOI for initial coverage under the general permit.

The USFWS issued a letter of no objection for the issuance of the current LPDES LAG830000 permit that expires December 14, 2007. In a separate letter dated September 29, 2006, from the United States Department of the Interior, Fish and Wildlife Service (F&WS) to Dr. Chuck Carr Brown, the F&WS states that:

> "Based on effluent limitations established for the protection of aquatic life and maintenance of the receiving waters as aquatic habitat, the Service has determined that the following general permits are not likely to adversely affect listed species, and therefore, no coordination is required: ... Petroleum UST Cleanup (LAG830000) ...".

The state finds that adoption of the reissuance permit is unlikely to have unauthorized adverse effects upon threatened or endangered species or on the critical habitat for these species. A copy of the draft permit and fact sheet are being submitted to the USFWS for their comments and/or letter of no objection to the re-issuance of this LPDES general permit.

## X. NATIONAL HISTORIC PRESERVATION ACT

An operator must be in compliance with the National Historic Preservation Act to be eligible for coverage under this general permit. Discharges may be authorized under this permit only if:

(1) Your storm water discharges, allowable non-storm water discharges, and discharge-related activities do not affect a property that is listed or eligible for listing on the National Register of Historic Places, unless they are in compliance with requirements of the National Historic Preservation Act and any necessary activities to avoid or minimize impacts have been coordinated with the Louisiana State Historic Preservation Officer (SHPO); and

(2) If applicable, you have obtained and are in compliance with a written agreement with the SHPO that outlines all measures you will undertake to mitigate or prevent adverse effects to the historic property.

The state finds that adoption of the reissued permit is unlikely to have unauthorized adverse effects upon properties listed or eligible for listing in the National Register of Historic Places provided that permittees are in compliance with Part I of the permit. The draft permit and fact sheet have been submitted to the State Historic Preservation Office for their comments and/or concurrence with the state's determination.

## XI. FEES

At the time of proposed issuance, the annual maintenance and surveillance fee for coverage under this permit will be $990.00 for site-specific permit coverage and $2640.00 for statewide permit coverage. A twenty percent surcharge (up to a maximum surcharge of $150.00) will be added to the annual fee of all facilities located in the following basins: Atchafalaya River, Barataria, Lake Pontchartrain, Mississippi River, and Terrebonne. Monies collected through this surcharge are deposited in the Oyster Sanitation Fund, which is used to support molluscan sanitation efforts. The agency may adjust fee amounts at a later date by promulgation in the Louisiana Administrative Code.

## XII. SCHEDULE OF COMPLIANCE

The permittee is to be in compliance with the permit limitations and conditions as of the date of coverage under the general permit. A Permit Statement of Basis will be used in the issuance of the permit. The Statement of Basis and a cover letter granting authorization to discharge under the general permit will be attached to a copy of the permit that is mailed to each permitee authorized to discharge under the general permit. The Statement of Basis will reiterate outfall numbers listed in the NOI that is submitted requesting permit coverage and it will reference the effluent limitations and monitoring requirements in the permit that apply to discharges from the outfall(s) that occurs at the permitted facility.

## XIII. STATE WATER QUALITY STANDARDS

The permit requires as an eligibility condition that covered discharges not cause or have the reasonable potential to cause or contribute to a violation of a state water quality standard. If a discharge is known to be doing such the operator must seek coverage under an alternative permit. Where a discharger is already operating under the permit and is later discovered to cause or have the reasonable potential to cause or contribute to the violation of a state water quality standard, the permitting authority will notify the operator of such violation(s) and the permittee shall take all necessary actions to ensure future discharges do not cause or contribute to the violation of a water quality standard and document the corrective actions that were taken. If violations remain or recur then coverage under the permit will be terminated after alternate coverage is obtained. Compliance with this requirement does not preclude any enforcement activity as provided by the Louisiana Environmental Quality Act (La. R.S. 30:2001, et seq.) for the underlying violation. A permit reopener clause is included in the permit.

Where an approved or established TMDL has not specified a wasteload allocation (WLA) applicable to discharges covered by this general permit, but has not specifically excluded these discharges, it will generally be assumed that discharges from facilities permitted under this general permit are consistent with approved TMDLs.

Each NOI received to request authorization under this LPDES general permit will be evaluated by the Agency to assure any WLA's are met, and that in-stream standards will not be violated by the proposed discharges. In each case a Statement of Basis documenting justification for the permitting decision shall be completed prior to any issuance of authorization under the general permit.

In order to meet the assumptions and requirements of established or approved TMDLs, coverage under this general permit may be denied and regulation under an individual permit required. Facilities that discharge to a specific 303(d) listed impaired water body will not be eligible for coverage under this general permit if the TMDL for that particular water body specifically precludes discharges covered by this general permit, or where the

discharge can be expected to cause or contribute to the water quality impairment addressed by the TMDL.

The general criteria and numerical criteria which make up the stream standards are provided in the "Louisiana Surface Water Quality Standards", (LAC 33:IX.11, amended as of September 1989, March 1991, April 1994, August 1994, July 1995, November 1996, and October 1998, October 2000).

For the purposes of assuring that state water quality standards are achieved, the following language is being included in the general permit (PART II, SECTION G) along with a reopener clause (PART II, SECTION M).

> LAC 33:IX.1113 describes numerical and general criteria that apply to all water bodies of the State. Criteria are elements of the water quality which set limitations on the permissible amounts of a substance or other characteristics of state waters. The General Criteria, as described in the Louisiana Administrative Code, limit discharges to maintain aesthetics, color, turbidity, the biologic and aquatic community integrity, and many other elements in the receiving water body. Any noncompliance with the General or Numerical Criteria is not authorized under this permit.

To comply with the requirements of LAC 33:IX.2317.A.9, this permit does not authorize a discharge from an operation which is classed as a new source or new discharge, as defined at LAC 33:IX.2313, if the discharge will cause or contribute to the violation of water quality standards. Discharges from facilities permitted under LPDES general permits typically consist of low volume flows, and discharges that are intermittent in nature. This general permit is applicable to very specific types of discharges that specifically occur at petroleum contaminated UST sites that are eligible for coverage under this permit. The permit effluent limitations and other conditions are determined to be sufficient to assure protection to state waters. New source discharges or new discharges of wastewater from a facility whose discharges are in compliance with the general permit requirements should not adversely impact water quality of 303(d) listed impaired water bodies nor should they cause or contribute to the violation of state water quality standards in receiving water bodies throughout the state, including 303(d) impaired water bodies.

Authorizing facility-specific permit coverage under this general permit will not negatively impact the water quality of receiving streams because permitted discharges are required to be in compliance with the general permit requirements immediately upon coverage by the permit. In accordance with Part II.F, II.H.1, and II.M measures can be taken by the permitting authority to prohibit any discharge that is not protective of state water quality standards.

Should a future TMDL require more stringent limitations for some facilities already covered by this general permit, individual permits will be proposed for those facilities in the TMDL-limited stream segment and coverage under this general permit will be terminated. Likewise, should it be determined during the NOI review process, or by information obtained from LDEQ surveillance staff, or by the receipt of a complaint from the public that more than one of the facilities covered by this general permit were having a cumulative impact on a receiving waterbody, then individual permits that contain more stringent water quality based permit limits will be issued to the facilities of concern.

Discharges of wastewater and/or industrial storm water from facilities that are eligible for general permit coverage are relatively small flows with short term duration. The experience which this Office has in permitting these discharges, and the absence of any quantifiable degradation to the receiving water bodies for discharges under previously-issued general permits, support the adequacy of continuing the previously applied conditions and effluent limitations to assure that water quality standards will be met, as supported in the following discussion and above in Part VII of this Fact Sheet.

The permit duplicates the parameters, limitations, and requirements found in the LPDES General Permit for Discharges Resulting from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems, effective December 15, 2002, except for the changes described above in Part VII.B.1.

EPA Region VI concurred that the effluent limitations established in the December 15, 2002, permit was protective of water quality standards. The state does not believe water quality issues have developed that were not considered when the 2002 permit was prepared; therefore, that determination is still valid and those limitations continue to be used in the permit.

The parameters and limits contained in the permit will offer adequate protection to any streams listed on the LDEQ Section 303(d) List of Impaired Water Bodies. DO impacted streams will be adequately protected by the TOC limitation of 50 mg/L.

## XIV. FINAL DETERMINATION

Facilities implementing a Corrective Action Plan generate common types of several types of wastewater and potentially contaminated storm water during the remediation of soil and groundwater contaminated by leaking or failing petroleum UST systems.

Although each NOI that is submitted for permit coverage does undergo a detailed review process to determine site-specific permit applicability, the availability of this general permit does streamline the permit issuance process by eliminating the time that a permit writer spends on actually writing an individual permit for each of the minor facilities that are eligible for coverage under the general permit. The consistency of permit limitations and conditions found in a general permit minimizes the time that supervisors and managers

spend reviewing a general permit authorization versus the time that would be required to review all the documents associated with issuing individual permit coverage to a facility.

The availability of an LPDES General Permit for Discharges from Implementing Corrective Action Plans for Cleanup of Petroleum UST Systems streamlines the permit process for certain sources that generate common types of wastewaters that can be effectively treated by common types of treatment systems, to meet the effluent limitations contained in the permit. Streamlining the permit process allows the Department to devote more resources to issuing individual LPDES permits to industrial facilities with discharges that require more regulatory oversight, while ensuring that the discharges covered under this general permit are protective of state water quality standards in receiving streams throughout the state.

In summary, the availability of an LPDES general permit for discharges resulting from implementing corrective action plans for cleanup of petroleum UST systems is a more efficient way of permitting these types of incidental, low-potential wastewaters, which facilitates the cleanup of areas and groundwater contaminated by leaking or failing UST systems. The cleanup of areas and groundwater contaminated by leaking or failing UST systems is essential to protect humans and wildlife that might be exposed to the contaminated area and/or groundwater.

This agency has determined that discharges covered by this authorization can be adequately treated by common types of groundwater treatment systems to meet the effluent limitations contained in the general permit. The resulting discharges that are in compliance with the permit limitations should not pose any reasonable potential to cause or contribute to any existing water quality or 303(d) listed impairment.

The effluent limitations and monitoring requirements of this permit are adequate to protect for the designated uses and water quality standards of Louisiana.

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to reissue the general permit for the discharges described above in Parts I and III, in order to facilitate the cleanup and restoration of groundwater resources and to create a safe environment for those who live or work around sites currently contaminated by leaking or failing UST systems.